ABSTRACT

The present invention is directed to a driving device and method for display period control of organic light emitting diode (OLED). A driving device includes a current buffer, a switching unit and a pulse width modulation (PWM) grayscale control unit. The current buffer is connected to an external current source providing constant current. The switching unit is connected to an external precharge voltage supply, a current buffer and analog grounding with an output connected to OLED. The PWM grayscale control unit is connected to an external memory and a switching unit for receiving start signal and grayscale display control in accordance with the image data transmitted by the memory. Grayscale is controlled according to the display phase during the display period for division of grayscale display duration in proportion to the individual grayscales corresponding to image data. Upon receiving image data, the driving device makes time control between the current buffer and OLED in compliance with corresponding grayscale display duration to achieve the purpose of grayscale display control.